

L Number	Hits	Search Text	DB	Time stamp
1	65	aberration near6 (outer adj2 (edge peripher\$4))	USPAT; US-PGPUB; EPO	2003/11/17 16:05
2	6	electrode same (aberration near6 (outer adj2 (edge peripher\$4)))	USPAT; US-PGPUB; EPO	2003/11/17 16:08
3	12	(aberration near6 (outer adj2 (edge peripher\$4))) and electrode	USPAT; US-PGPUB; EPO	2003/11/17 16:08
4	6	((aberration near6 (outer adj2 (edge peripher\$4))) and electrode) not (electrode same (aberration near6 (outer adj2 (edge peripher\$4))))	USPAT; US-PGPUB; EPO	2003/11/17 16:08

L Number	Hits	Search Text	DB	Time stamp
2	3446	increas\$4 near3 aberration	USPAT; US-PGPUB; EPO	2003/11/17 13:19
3	125	((increas\$4 near3 aberration) same electrode	USPAT; US-PGPUB; EPO	2003/11/17 13:19
5	7	((increas\$4 near3 aberration) same electrode) same tilt\$4	USPAT; US-PGPUB; EPO	2003/11/17 13:20

File 348:EUROPEAN PATENTS 1978-2003/Nov W02

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106

(c) 2003 WIPO/Univentio

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Set	Items	Description
S1	116392	ELECTRODE
S2	1013	(MAXIMI? OR ENLAR? OR HIGHER OR RAISE OR MORE OR HEIGHTEN - OR RAISING) (5N)ABERRATION?
S3	19528	S1(5N)(POSITION? OR PLACEMENT OR PLACING OR PLACED OR LOCA- TION)
S4	0	S2(5N)RADIAL()TILT??
S5	2774	OPTICAL()PICKUP
S6	35312	IC=G11B?
S7	0	S2(10N)S3
S8	2	S2(S)S3
S9	6	S1(10N)S2
S10	5	S9 NOT S8
S11	5	IDPAT (sorted in duplicate/non-duplicate order)
S12	5	IDPAT (primary/non-duplicate records only)

File 2:INSPEC 1969-2003/Nov W2  
(c) 2003 Institution of Electrical Engineers  
File 6:NTIS 1964-2003/Nov W3  
(c) 2003 NTIS, Intl Cpyrght All Rights Res  
File 8:Ei Compendex(R) 1970-2003/Nov W2  
(c) 2003 Elsevier Eng. Info. Inc.  
File 34:SciSearch(R) Cited Ref Sci 1990-2003/Nov W2  
(c) 2003 Inst for Sci Info  
File 35:Dissertation Abs Online 1861-2003/Oct  
(c) 2003 ProQuest Info&Learning  
File 62:SPIN(R) 1975-2003/Oct W1  
(c) 2003 American Institute of Physics  
File 65:Inside Conferences 1993-2003/Nov W3  
(c) 2003 BLDSC all rts. reserv.  
File 94:JICST-Eplus 1985-2003/Nov W3  
(c)2003 Japan Science and Tech Corp(JST)  
File 95:TEME-Technology & Management 1989-2003/Oct W4  
(c) 2003 FIZ TECHNIK  
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Oct  
(c) 2003 The HW Wilson Co.  
File 144:Pascal 1973-2003/Nov W2  
(c) 2003 INIST/CNRS  
File 233:Internet & Personal Comp. Abs. 1981-2003/Jul  
(c) 2003, EBSCO Pub.  
File 239:Mathsci 1940-2003/Dec  
(c) 2003 American Mathematical Society  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 The Gale Group  
File 603:Newspaper Abstracts 1984-1988  
(c)2001 ProQuest Info&Learning  
File 483:Newspaper Abs Daily 1986-2003/Nov 15  
(c) 2003 ProQuest Info&Learning  
? ds

Set	Items	Description
S1	450821	ELECTRODE
S2	17929	(MAXIMI? OR ENLAR? OR HIGHER OR RAISE OR MORE OR HEIGHTEN - OR RAISING) AND ABERRATION?
S3	27080	S1 AND (POSITION? OR PLACEMENT OR PLACING OR PLACED OR LOC- ATION)
S4	3	S2 AND RADIAL()TILT??
S5	987	OPTICAL()PICKUP
S6	10	S2 AND S3
S7	6	RD S6 (unique items)

(c) 2003 The Dialog Corp.  
File 674:Computer News Fulltext 1989-2003/Nov W2  
(c) 2003 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc

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Set	Items	Description
S1	44379	ELECTRODE
S2	1855	(MAXIMI? OR ENLAR? OR HIGHER OR RAISE OR MORE OR HEIGHTEN - OR RAISING) (5N)ABERRATION?
S3	2802	S1(5N) (POSITION? OR PLACEMENT OR PLACING OR PLACED OR LOCA- TION)
S4	0	S2(5N)RADIAL()TILT??
S5	1213	OPTICAL()PICKUP
S6	2	S2(S)S3
S7	1	RD S6 (unique items)
S8	2	S1(S)S2
S9	0	S8 NOT S6

7/3,K/1 (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2003 The Gale group. All rts. reserv.

05820993 SUPPLIER NUMBER: 62702585 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Technology in the Assessment of Learning Disability.**

Bigler, Erin D.; Lajiness-O'Neill, Renee; Howes, Nancy-Louise

Journal of Learning Disabilities, 31, 1, 67

Jan, 1998

ISSN: 0022-2194 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 11267 LINE COUNT: 00963

... for such disorders they are highly reliable when positive findings are observed. For disorders with **more** subtle brain-function laberrations , however, EEG is far less sensitive (Duffy, 1985). Slight variations in **electrode placement** ; movement artifacts; and emotional, cognitive, and developmental factors unique to the individual participant all have...  
?

File 9:Business & Industry(R) Jul/1994-2003/Nov 14  
(c) 2003 Resp. DB Svcs.  
File 15:ABI/Inform(R) 1971-2003/Nov 15  
(c) 2003 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2003/Nov 14  
(c) 2003 The Gale Group  
File 20:Dialog Global Reporter 1997-2003/Nov 17  
(c) 2003 The Dialog Corp.  
File 47:Gale Group Magazine DB(TM) 1959-2003/Nov 14  
(c) 2003 The Gale group  
File 75:TGG Management Contents(R) 86-2003/Nov W2  
(c) 2003 The Gale Group  
File 80:TGG Aerospace/Def.Mkts(R) 1986-2003/Nov 14  
(c) 2003 The Gale Group  
File 88:Gale Group Business A.R.T.S. 1976-2003/Nov 13  
(c) 2003 The Gale Group  
File 98:General Sci Abs/Full-Text 1984-2003/Oct  
(c) 2003 The HW Wilson Co.  
File 112:UBM Industry News 1998-2003/Nov 17  
(c) 2003 United Business Media  
File 141:Readers Guide 1983-2003/Oct  
(c) 2003 The HW Wilson Co  
File 148:Gale Group Trade & Industry DB 1976-2003/Nov 17  
(c)2003 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2003/Nov 14  
(c) 2003 The Gale Group  
File 264:DIALOG Defense Newsletters 1989-2003/Nov 14  
(c) 2003 The Dialog Corp.  
File 369:New Scientist 1994-2003/Nov W2  
(c) 2003 Reed Business Information Ltd.  
File 370:Science 1996-1999/Jul W3  
(c) 1999 AAAS  
File 484:Periodical Abs Plustext 1986-2003/Nov W2  
(c) 2003 ProQuest  
File 553:Wilson Bus. Abs. FullText 1982-2003/Oct  
(c) 2003 The HW Wilson Co  
File 570:Gale Group MARS(R) 1984-2003/Nov 17  
(c) 2003 The Gale Group  
File 608:KR/T Bus.News. 1992-2003/Nov 17  
(c)2003 Knight Ridder/Tribune Bus News  
File 620:EIU:Viewswire 2003/Nov 14  
(c) 2003 Economist Intelligence Unit  
File 613:PR Newswire 1999-2003/Nov 17  
(c) 2003 PR Newswire Association Inc  
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Nov 17  
(c) 2003 The Gale Group  
File 623:Business Week 1985-2003/Nov 14  
(c) 2003 The McGraw-Hill Companies Inc  
File 624:McGraw-Hill Publications 1985-2003/Nov 14  
(c) 2003 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2003/Nov 15  
(c) 2003 San Jose Mercury News  
File 635:Business Dateline(R) 1985-2003/Nov 15  
(c) 2003 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2003/Nov 14  
(c) 2003 The Gale Group  
File 647:CMP Computer Fulltext 1988-2003/Oct W3  
(c) 2003 CMP Media, LLC  
File 696:DIALOG Telecom. Newsletters 1995-2003/Nov 14

File 344:Chinese Patents Abs Aug 1985-2003/Apr  
(c) 2003 European Patent Office  
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)  
(c) 2003 JPO & JAPIO  
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200373  
(c) 2003 Thomson Derwent

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Set	Items	Description
S1	747171	ELECTRODE
S2	2169	(MAXIMI? OR ENLAR? OR HIGHER OR RAISE OR MORE OR HEIGHTEN - OR RAISING) AND ABERRATION?
S3	110747	S1 AND (POSITION? OR PLACEMENT OR PLACING OR PLACED OR LOC- ATION)
S4	0	S2 AND RADIAL()TILT??
S5	13624	OPTICAL()PICKUP
S6	25	S2 AND S3
S7	539846	IC=G11B?
S8	2	S6 AND S7
S9	23	S6 NOT S8
S10	2	S9 AND AD=20000414:20031031
S11	21	S9 NOT S10
S12	1	S11 AND OPTICAL
S13	20	S11 NOT (S12 OR S10 OR S8)
S14	20	IDPAT (sorted in duplicate/non-duplicate order)
S15	20	IDPAT (primary/non-duplicate records only)
S16	387	(MAXIMI? OR ENLAR? OR HIGHER OR RAISE OR MORE OR HEIGHTEN - OR RAISING) (5N)ABERRATION?
S17	21	S1 AND S16
S18	2	S17 AND (POSITION? OR PLACEMENT OR PLACING OR PLACED OR LO- CATION)
S19	1	S18 NOT (S9 OR S10 OR S13)



8/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

02490069 \*\*Image available\*\*  
HEAD DEVICE

PUB. NO.: 63-106969 [JP 63106969 A]  
PUBLISHED: May 12, 1988 (19880512)  
INVENTOR(s): MORIMOTO MASAO  
APPLICANT(s): CANON ELECTRONICS INC [365668] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 61-250664 [JP 86250664]  
FILED: October 23, 1986 (19861023)  
JOURNAL: Section: P, Section No. 761, Vol. 12, No. 354, Pg. 106, September 22, 1988 (19880922)

INTL CLASS: G11B-021/10 ; G11B-005/56 ; G11B-021/24

ABSTRACT

PURPOSE: To improve magnetic recording and reproducing characteristics, by coupling a head with a track **position** adjusting mechanism through an element which is deformed by the impression of a voltage or a current, and displaces the head in a direction of adjusting a track **position** .

...

... lamination type piezoelectric element 16 is the one in which a piezoelectric material and an **electrode** which impresses the voltage on the material are laminated alternately, and when the voltage is applied on the **electrode** , it is contracted in a direction of a plate thickness by a piezoelectric longitudinal effect...

... the movement of the carriage, by driving the lamination type piezoelectric element 16, from a **position** **positioned** by the movement of the carriage 4. In such a way, it is possible to adjust the track **position** of the head **more** precisely, and to correct the **aberration** of the track **position** .

8/3,K/2 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015550997 \*\*Image available\*\*  
WPI Acc No: 2003-613152/200358  
XRPX Acc No: N03-489269

Optical head for optical disk drive, has different power supply units connected to electrodes of position correction element comprising anisotropy optical medium, provided between light source and objective lens

Patent Assignee: ASAHI GLASS CO LTD (ASAG )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003228871	A	20030815	JP 200223345	A	20020131	200358 B

Priority Applications (No Type Date): JP 200223345 A 20020131

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003228871	A		6 G11B-007/135	

Optical head for optical disk drive, has different power supply units connected to electrodes of position correction element comprising anisotropy optical medium, provided between light source and objective lens

Abstract (Basic):

... The optical head has a **position** correction element provided between light source and objective lens. The correction element comprises anisotropy optical...

... By providing two or **more** power supply units at electrodes of **position** correction element, wave **aberration** produced by tilt and non-uniformity are efficiently corrected. Since all electrodes used in **position** correction element are alike, yield of **position** correction element production process is improved using stannic-oxide for electrodes. Ensures that the property of the **position** correction element does not degrade with time...

...The figure shows a sectional view of the **position** correction element

...  
...Title Terms: **ELECTRODE** ;

International Patent Class (Main): **G11B-007/135**

?

12/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

010927056 \*\*Image available\*\*  
WPI Acc No: 1996-424007/199642  
XRPX Acc No: N96-357036

**Detecting and correcting dynamic crosstalk effects appearing in moving display patterns - solving so-called display pattern splicing in passive matrix display implemented with active addressing TM techniques**

Patent Assignee: IN FOCUS SYSTEMS INC (INFO-N)  
Inventor: CLIFTON B R; LEYBOLD W J; PRINCE D W  
Number of Countries: 071 Number of Patents: 005  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
TW 279965	A	19960701	TW 95104818	A	19950516	199642 B
WO 9629694	A1	19960926	WO 96US4073	A	19960320	199644
AU 9654305	A	19961008	AU 9654305	A	19960320	199704
US 5640173	A	19970617	US 95407951	A	19950321	199730
JP 2000507361	W	20000613	JP 96528661	A	19960320	200035
			WO 96US4073	A	19960320	

Priority Applications (No Type Date): US 95407951 A 19950321

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
TW 279965	A		10	G09G-003/36	
WO 9629694	A1 E	41		G09G-003/36	

Designated States (National): AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN  
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG

AU 9654305	A			G09G-003/36	Based on patent WO 9629694
US 5640173	A		17	G09G-003/36	
JP 2000507361	W		34	G09G-003/36	Based on patent WO 9629694

...Abstract (Basic): Splicing is an **optical aberration** that is manifested by a transient pixel rms voltage deviation from a current, frame-averaged...

...pattern splicing apply a correction of some type to counteract the effects of the transient **optical** response. Preferred active solutions are premised on the observation that splicing is an effect common...

...Abstract (Equivalent): In an rms-responding display, the display including overlapping first and second electrodes **positioned** on opposite sides of an rms-responding material to define an array of pixels that...

...of the first signals in the set each causing multiple selections of its corresponding first **electrode** during a frame that is divided into time intervals, the multiple selections taking place during...

...display receiving on the second electrodes second signals having during the frame period amplitudes with **more** than one magnitude determined in part by pixel input data of pixels defined by the...

...the amplitude of each of the second signals produced for application to its corresponding second **electrode** a quantity indicative of a transient **optical** response of the display to a change in information provided for display by the pixels defined on their corresponding

second **electrode** during successive frame periods of the set of first signals; and...

...producing from the quantity a detection signal that represents the intensity of the transient **optical** response of the display...

?

15/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

012055806 \*\*Image available\*\*  
WPI Acc No: 1998-472717/199841  
XRPX Acc No: N98-369020

**Multibeam electron gun for colour CRT - employs two sets of quadrupole electrode pairs, principal axis dimensions of beam cross-sections being related to beam window geometry in each electrode pair**

Patent Assignee: SONY CORP (SONY )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10199445	A	19980731	JP 976409	A	19970117	199841 B

Priority Applications (No Type Date): JP 976409 A 19970117

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10199445	A		11 H01J-029/50	

... employs two sets of quadrupole electrode pairs, principal axis dimensions of beam cross-sections being related to beam window geometry in each electrode pair

...Abstract (Basic): The electron gun has two sets of quadrupole electrode pairs (21,23,25,27) that have characteristically oriented beam windows (22,24,26,28) in them vis-a-vis the main traverse path of the electron beam. The electrode pairs are positioned with specific axial reference to the cathode and the main focussing lens...

...0.15  $\leq A/C \leq 0.4$  and 0.15  $\leq B/D \leq 0.4$  at each electrode pair. The arrangement applies to all the three electron beams involved...

...ADVANTAGE - Improves resolution by suppressing beam aberrations .  
Enhances main focussing lens capability through higher design freedom in regard to quadrupole electrodes...

...Title Terms: ELECTRODE ;

15/3,K/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

011742111 \*\*Image available\*\*  
WPI Acc No: 1998-159021/199814  
XRPX Acc No: N98-126444

**Spherical aberration reduction method for scanning electron CT X-ray system - minimises beam spot halo and maximises image definition by selecting electron gun cathode axial position and PIE potential so their contribution to spherical aberrations at the final beam spot cancel**

Patent Assignee: IMATRON INC (IMAT-N)  
Inventor: GAREWAL K; JAMES G R; RAND R E  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5719914	A	19980217	US 95557969	A	19951113	199814 B

Priority Applications (No Type Date): US 95557969 A 19951113

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
US 5719914 A 17 G01N-023/00

**Spherical aberration reduction method for scanning electron CT X-ray system...**

...minimises beam spot halo and maximises image definition by selecting electron gun cathode axial position and PIE potential so their contribution to spherical aberrations at the final beam spot cancel

...Abstract (Basic): the electron gun cathode on an axis projecting through the vacuum housing chamber at a **location** where non-uniformity of current density in the electron beam contributes a first effect to spherical aberration ,  
(...

...b) disposing a positive ion **electrode** (PIE) downstream from and coaxially with the electron gun, the PIE being coupled to a...

...in a transition region of the electron beam and contributes a second effect to spherical aberration and

...Title Terms: **ABERRATION** ;

15/3,K/3 (Item 3 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

010913499

WPI Acc No: 1996-410450/199641

**Electron gun for colour CRT - has cathode control electrode , screen electrode , number of focus lenses and final acceleration electrode with electron beam hole in focus lens which receives higher voltage than acceleration lens**

Patent Assignee: SAMSUNG ELECTRON DEVICES CO LTD (SMSU )

Inventor: KIM Y; SON W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 9410985	B1	19941121	KR 928468	A	19920519	199641 B

Priority Applications (No Type Date): KR 928468 A 19920519

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes  
KR 9410985 B1 H01J-029/50

... has cathode control electrode , screen electrode , number of focus lenses and final acceleration electrode with electron beam hole in focus lens which receives higher voltage than acceleration lens

...Abstract (Basic): The electron gun comprises a cathode control **electrode** (22), a screen **electrode** (23), a number of uni-potential type focus lenses (24-28), and a bi-potential type final acceleration **electrode** (29). The electron beam hole of the focus lens is **placed** beside a cathode (21). The focus lens receives a **higher** voltage than the low voltage received by the acceleration lens...

...ADVANTAGE - Reduces spatial **aberration** of electrostatic lens.

...Title Terms: **ELECTRODE** ;

15/3,K/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

010107695 \*\*Image available\*\*  
WPI Acc No: 1995-008948/199502  
XRPX Acc No: N97-346385

**Electron gun for colour CRT - has control electrode plate positioned in envelope and recessed from rim by set distance in axial direction in order to control electron beams**

Patent Assignee: GOLDSTAR CO LTD (GLDS ); KINSEISHA KK (GLDS ); LG ELECTRONICS CO LTD (GLDS )

Inventor: HYUN K W; KIM W H; KIM W

Number of Countries: 004 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 6236736	A	19940823	JP 93245437	A	19930930	199502 B
KR 9502741	B1	19950324	KR 9220079	A	19921029	199707
CN 1093199	A	19941005	CN 93114170	A	19930930	199717
US 5592046	A	19970107	US 93127528	A	19930928	199739
KR 9612415	B1	19960920	KR 9314947	A	19930802	199926

Priority Applications (No Type Date): KR 9314947 A 19930802; KR 9217927 A 19920930; KR 9220079 A 19921029

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 6236736	A		10	H01J-029/50	
US 5592046	A		13	H01J-029/50	
KR 9502741	B1			H01J-029/50	
CN 1093199	A			H01J-029/50	
KR 9612415	B1			H01J-029/50	

... has control electrode plate positioned in envelope and recessed from rim by set distance in axial direction in order to...

...Abstract (Basic): opening. The rim surrounds the electron beams and defines the common opening and a control **electrode** plate is **placed** in the envelope and recessed from the rim by a predetermined distance in the axial...

...Each **electrode** plate has a central opening and a pair of opposed outer openings. The centre opening...

...a rectangular opening or rounded at its upper and lower ends. The outer openings are **positioned** at opposed sides of the centre opening and each opening toward an inner surface of the envelope. The open space of the outer opening may be gradually **enlarged** toward the inner surface of the envelope...

...ADVANTAGE- Reduces spherical **aberration** and flying spot **aberration** , thus improving resolution of CRT...

...Abstract (Equivalent): in the axial direction about a horizontal line located midway between the electrodes, and each **electrode** being substantially symmetrical in said horizontal direction, said pair of electrodes providing passages for said...

...a control **electrode** plate, located within an envelope, having upper and lower beam members connected by a pair...

...of the center opening formed by said column members is located at a first axial **position** which is different from axial **positions** of the top and bottom sides of the center opening...

...Title Terms: **ELECTRODE** ;

15/3,K/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

008866464 \*\*Image available\*\*  
WPI Acc No: 1991-370490/199151  
XRPX Acc No: N91-283657

**High resolution electron microscope with low beam energy - uses concentric two-stage electrodes to increase resolution and minimise aberrations**

Patent Assignee: ICT INTEGRATED CIRCUIT TESTING (ICTI-N); ICT INTEGRATED CIRCUIT TESTING HALBLEITERPRUEFTECHNIK GMBH (ICTI-N); SIEMENS AG (SIEI )

Inventor: PLIES E

Number of Countries: 007 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 461442	A	19911218	EP 91461442	A	19910523	199151 B
US 5146090	A	19920908	US 91691238	A	19910425	199239
JP 5036371	A	19930212	JP 91163940	A	19910607	199311
EP 461442	A3	19920304	EP 91108372	A	19910523	199325
EP 461442	B1	19960918	EP 91108372	A	19910523	199642
DE 59108193	G	19961024	DE 508193	A	19910523	199648
			EP 91108372	A	19910523	
JP 3268583	B2	20020325	JP 91163940	A	19910607	200222

Priority Applications (No Type Date): DE 4018690 A 19900611

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 461442	A				
				Designated States (Regional): DE FR GB IT NL	
US 5146090	A		7	H01J-037/04	
JP 5036371	A			H01J-037/28	
EP 461442	B1 G	8		H01J-037/28	
				Designated States (Regional): DE FR GB IT NL	
DE 59108193	G			H01J-037/28	Based on patent EP 461442
JP 3268583	B2	6		H01J-037/28	Previous Publ. patent JP 5036371

... **uses concentric** two-stage electrodes to increase resolution and **minimise** aberrations

...Abstract (Basic): and are used to accelerate the beam (PE) from one potential (U1) to a second **higher** potential (U2). The first **electrode** (SR) forms an anode...

...beam energy to reduce work damage. Increase in resolution at comparatively large work distances. Lens **aberrations** minimised. (7pp Dwg.No.3/5)

...Abstract (Equivalent): wherein means (SR,RE) for accelerating the particles (PE) from a first energy to a **higher** second energy are disposed in the intermediate image (ZB), characterised by a first immersion lens...

...Abstract (Equivalent): a beam-guiding tube that is at an anode potential and of a further tube **electrode** that is arranged and insulated in the column of the scanning electron microscope and is...



...Since the tube **electrode** extends into the region of the pole piece gap of the objective lens, an electrical field that decelerates the electrons to the desired ultimate energy is built up at this **location**. Due to the retarding field overlaid on the focusing magnetic field of the objective lens, the lens has extremely low chromatic **aberration** and spherical **aberration** constants. Moreover, the influence of the Boersch effect is considerably diminished as a consequence of...

...Title Terms: **ELECTRODE** ;

15/3,K/6 (Item 6 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

004417173

WPI Acc No: 1985-244051/198540

XRPX Acc No: N85-182676

**Cathode ray tube with flat foil or gauze - intersecting electron beam at distance from lens gap between two electrodes within set range**

Patent Assignee: PHILIPS GLOEILAMPENFAB. NV (PHIG )

Inventor: VANGORKUM A A

Number of Countries: 010 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 156431	A	19851002	EP 85200373	A	19850313	198540 B
NL 8400841	A	19851016				198546
JP 60211746	A	19851024				198549
DD 232375	A	19860122				198621
US 4625146	A	19861125	US 84609620	A	19840514	198650
ES 8700799	A	19870116	ES 541218	A	19850313	198711
CA 1221724	A	19870512				198723
EP 156431	B	19880615				198824
DE 3563399	G	19880721				198830

Priority Applications (No Type Date): NL 84841 A 19840316

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 156431	A	E 20		

Designated States (Regional): DE FR GB IT NL

EP 156431	B	E
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Designated States (Regional): DE FR GB IT NL

...Abstract (Basic): gauze to the lens gap and R is the radius of the part of the **electrode** in which or near which the foil or gauze is provided  
...

...ADVANTAGE - Field strength on foil or gauze becomes **more** and **more** constant. Consequently, spherical **aberration** of lens becomes small and can even be made negative locally...

...Abstract (Equivalent): direction of propagation of the electron beam, comprises a first (22) and a second (23) **electrode** having facing end portions with respective first and second openings (28), said end portions being separated by a predetermined gap, in which second **electrode** (23) an electrically conductive foil or gauze (31) which intersects the beam is provided at...

...Abstract (Equivalent): propagation of the electron beam, comprises a first (22,50) and a second (23,51) **electrode** separated by a lens gap (30,53). In the second **electrode** is an electrically conductive foil or gauze (31,52) intersects the beam at a...

...When the foil or gauze is flat and is provided at such a **location** that  
l/R lies within 0.25 and 2.0. l is the distance from...

...to the lens gap and R is the radius of the part of the second **electrode**  
in which or against which the foil or gauze is provided...

...ADVANTAGE - Spherical **aberration** in electron beam is drastically  
reduced. (10pp)

...Title Terms: **ELECTRODE** ;

15/3,K/7 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

004223282

WPI Acc No: 1985-050161/198508

XRPX Acc No: N85-037371

**Focused ion beam column - uses two accelerating lenses, analyser slit and  
deflector to produce small spot size over large field for exposure of  
resist**

Patent Assignee: HUGHES AIRCRAFT CO (HUGA )

Inventor: CLARK W M; MCKENNA C M; SELIGER R L

Number of Countries: 010 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8500693	A	19850214	WO 84US982	A	19840625	198508 B
EP 155283	A	19850925	EP 84903206	A	19840625	198539
JP 60501828	W	19851024				198549
US 4556798	A	19851203				198551
CA 1214577	A	19861125				198652
EP 155283	B	19880622				198825
DE 3472331	G	19880728				198831

Priority Applications (No Type Date): US 83512879 A 19830712

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
-----------	------	--------	----------	--------------

WO 8500693	A	E	20	
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Designated States (National): JP

Designated States (Regional): AT CH DE FR GB NL

EP 155283	A	E	
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Designated States (Regional): AT CH DE FR GB LI NL

EP 155283	B	E	
-----------	---	---	--

Designated States (Regional): AT CH DE FR GB LI NL

...Abstract (Basic): an ion source (14) producing charged ionic particles  
including a desired ion species. An extraction **electrode** (18) removes  
the positively charged ion particles to form an ion beam (16). An  
accelerating...

...focuses the beam through the first lens with near unity magnification so  
that an unmagnified **aberration** - limited image of the source appears  
at the mass analyser slit- and through the second...

...ADVANTAGE - Addresses field of about 1mm square at target while  
maintaining **aberration** limited spot size to less than 1000 Angstroms.  
Exposes images smaller than 0.1 micron...

...Abstract (Equivalent): source (14) for producing positively charged  
ionic particles including a desired ion species; an acceleration  
**electrode** (18) for extracting the positively charged ion particles to

form an ion beam (16), which acceleration **electrode** is the first element of a first lens (20) comprising three elements; a mass separator...

...an analyser slit (26); second and third elements (22,24) of said first lens (20) **positioned** between said acceleration **electrode** (18) and said analyser slit (26) for focusing the desired species of ion in the ion...

...second lens (36) being configured to be an accelerating and demagnifying lens; a deflector (42) **positioned** between said second lens (36) and said target plane for deflecting the beam (16) over...

...1 mm, square field with deflection angles of no greater than about 10 mrad., whereby **aberration** -induced increases in spot size at the target plane are limited to no **more** than about 25%; said power supply means are connected to said ion source (14), said acceleration **electrode** (18), said second and third elements (22,24) of said first lens (20), said second...

...Abstract (Equivalent): The device includes an ion source for producing positively charged ionic particles, and an extraction **electrode** for extracting the positively charged ion particles to form an ion beam. An accelerating lens...

...A second accelerating lens for demagnifying the beam is **positioned** downstream from the analyser slit, and focuses the beam of desired ion species onto a target plane. A deflector is **positioned** between the downstream, second lens and the target plane for deflecting the beam over a...

15/3,K/8 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

001455381

WPI Acc No: 1976-B8274X/197608

**Charged particle beam appts. with aperture between lenses - has two more electrode assemblies providing axial unipotential surfaces**

Patent Assignee: MINNESOTA MINING CO (MINN )

Number of Countries: 007 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 3937958	A	19760210				197608 B
DE 2608958	A	19761014				197643
FR 2306523	A	19761202				197705
GB 1549451	A	19790801				197931
CA 1059656	A	19790731				197933
CH 613812	A	19791015				197945
IT 1059401	B	19820531				198243

Priority Applications (No Type Date): US 75563330 A 19750331

... has two more electrode **assemblies providing axial unipotential surfaces**

...Abstract (Basic): e.g. ions or electrons) apparatus including two electrostatic focusing lenses (22, 26) and an **electrode** having a diameter limiting aperture **positioned** between the lenses is further provided with two **electrode** assemblies (34, 52) which interact with an extractor **electrode** and with a source of charged particles such

that the trajectories of the particles in...

...under a first set of conditions can be focused to provide a small-diameter, spherical- **aberration** limited beam and which under another set of conditions, can be focused to provide a...

...Title Terms: **MORE** ;

15/3,K/9 (Item 9 from file: 347)

DIALOG(R)File 347:JAPIO

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06928115 \*\*Image available\*\*

COLOR PICTURE TUBE

PUB. NO.: 2001-155656 [JP 2001155656 A]

PUBLISHED: June 08, 2001 (20010608)

INVENTOR(s): KIMIYA JUNICHI

OKUBO SHUNJI

APPLICANT(s): TOSHIBA CORP

APPL. NO.: 11-334599 [JP 99334599]

FILED: November 25, 1999 (19991125)

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide an electron gun in which, the **aberration** in a large aperture main lens is decreased, large aperture is realized, assembly precision is...

...whole image area.

SOLUTION: In the electron gun, the main focus lens comprises a focus **electrode** G5 with middle level focus voltage applied, an anode **electrode** G6 applied with high level anode voltage, and a middle **electrode** GM which is **placed** between the focus **electrode** G5 and the anode **electrode** G6 and has middle potential in the middle potential of the middle-high potential which is **higher** than the focus voltage and lower than the anode voltage. The anode **electrode** G6 and the middle **electrode** GM is a long cylinder body in the direction of common inline to 3 electron...

...angle to the inline direction of the cylinder body, the open aperture of the anode **electrode** G6 is determined to be made smaller than the open aperture of the middle **electrode** GM, multiple **electrode** lens which is common to the 3 electron beams is formed as the large aperture...

15/3,K/10 (Item 10 from file: 347)

DIALOG(R)File 347:JAPIO

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05889369 \*\*Image available\*\*

ELECTRON GUN FOR IN-LINE THREE-BEAM TYPE CATHODE-RAY TUBE

PUB. NO.: 10-172469 [JP 10172469 A]

PUBLISHED: June 26, 1998 (19980626)

INVENTOR(s): OSHIO SATORU

APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 08-338935 [JP 96338935]

FILED: December 04, 1996 (19961204)

ABSTRACT

... by specifically constituting a structure of an electron beam through hole provided with an intermediate **electrode** through which a side electron beam pass...

...SOLUTION: A voltage to be applied to an intermediate **electrode** 20 is **higher** than that to be applied to a second **electrode** 12. Therefore, an electric field having a recess lens effect is formed between the second **electrode** 12 and the intermediate **electrode** 20. Moreover, a side electron beam is deflected in a center electron beam direction by an electric field formed in the vicinity of a recess face 24 of the intermediate **electrode** 20. Thus, the side **electrode** beam is deflected in the center **electrode** beam direction in the electric field formed by the intermediate **electrode** 20, thereby the Fraunhofer's condition is met, that is, at a **position** at which a coma **aberration** is 0, three electron beams can be crossed at one point.

15/3,K/11 (Item 11 from file: 347)

DIALOG(R)File 347:JAPIO

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05365764 \*\*Image available\*\*

COLOR PICTURE TUBE

PUB. NO.: 08-321264 [JP 8321264 A]

PUBLISHED: December 03, 1996 (19961203)

INVENTOR(s): UEDA YASUYUKI

APPLICANT(s): MATSUSHITA ELECTRON CORP [000584] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 07-127715 [JP 95127715]

FILED: May 26, 1995 (19950526)

ABSTRACT

... color picture tube having a high resolution by furnishing two auxiliary electrodes between a convergence **electrode** and final acceleration **electrode**, **enlarging** the bore of a main lens electric field without increasing the neck diameter of a glass bulb, and thereby reducing ill influence of eventual spherical **aberration**.

...

...CONSTITUTION: Two auxiliary electrodes 9, 10 are installed between a convergence **electrode** 7 on which a focus voltage is impressed and a final acceleration **electrode** 8 on which an anode voltage is impressed, wherein the convergence **electrode** 7 and final acceleration **electrode** 8 are composed of respective cylinders 12, 14 having a long circular section and end...

... 13 in the form of long circle which are fitted inside of the cylinders in **positions** retreated from openings on the aux. **electrode** side. The aux. electrodes 9, 10 consist of respective cylinders having a long circular section. The four electrodes are arranged coaxially, and the anode voltage is impressed on one aux. **electrode** 9 opposing to the convergence **electrode** 7, while the focus voltage is impressed on the other aux. 10 which is opposing to the final acceleration **electrode** 14.

15/3,K/12 (Item 12 from file: 347)

DIALOG(R)File 347:JAPIO

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05216369    \*\*Image available\*\*  
COLOR PICTURE TUBE

PUB. NO.:        08-171869 [JP 8171869 A]  
PUBLISHED:      July 02, 1996 (19960702)  
INVENTOR(s):    SUGAWARA SHIGERU  
                 KIMIYA JUNICHI  
                 KANBARA EIJI  
APPLICANT(s):   TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP  
                 (Japan)  
APPL. NO.:      06-312961 [JP 94312961]  
FILED:          December 16, 1994 (19941216)

ABSTRACT

... side, comprising the first electron lens from the first to the third electrodes in a **position** from the negative **electrode** side to a screen, and setting its **electrode** potential to a prescribed potential...

... as strongly focusing in the horizontal direction, and the outer beam 6(sub o) emits **more** largely than the inner beam 6(sub i). The beam 6(sub o) largely receives spherical **aberration** in a region of a next cylindrical electron lens component CL so as to be...

... beam 6 passes toward an isolated axis than the beam 6(sub o), receives spherical **aberration**, and is focused on a phosphor screen 3. Beam 6(sub o) is also focused on the same **position** as the beam 6(sub i). The electron beams 6 are horizontally focused on the...

15/3,K/13        (Item 13 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

05183068    \*\*Image available\*\*  
ELECTRON GUN OF CATHODE-RAY TUBE

PUB. NO.:        08-138568 [JP 8138568 A]  
PUBLISHED:      May 31, 1996 (19960531)  
INVENTOR(s):    MUCHI TSUNEO  
                 TAGAMI SHIGENORI  
                 SAITO TSUNENARI  
                 KIKUCHI NORIFUMI  
APPLICANT(s):   SONY CORP [000218] (A Japanese Company or Corporation), JP  
                 (Japan)  
APPL. NO.:      06-274068 [JP 94274068]  
FILED:          November 08, 1994 (19941108)

ABSTRACT

... and dielectric breakdown voltage, allows reduction of the spot diameter through lessening of the spherical **aberration** coefficient of the lens system, and can enhance the resolution...

... and at least a ring-shaped high voltage elecetrode 10 and ring-shaped medium voltage **electrode** 9 are installed inside the resistance cylinder 3A in such a **positioning** as apart from each other in the axial direction, wherein the impressed voltage on the medium voltage **electrode** 9 is lower than that on the high voltage **electrode** 10. Between these two electrodes 10 and 9, at least one electroconductive ring 11AA is...

... of the resistance cylinder 3A. The resistance value of the conductive ring 11A is set **higher** in one to ten figures than the resistance value of the high voltage **electrode** 10 and middle voltage **electrode** 9.

15/3,K/14 (Item 14 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

05067280 \*\*Image available\*\*  
COLOR PICTURE TUBE DEVICE

PUB. NO.: 08-022780 [JP 8022780 A]  
PUBLISHED: January 23, 1996 (19960123)  
INVENTOR(s): UEDA YASUYUKI  
APPLICANT(s): MATSUSHITA ELECTRON CORP [000584] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 06-157749 [JP 94157749]  
FILED: July 11, 1994 (19940711)

#### ABSTRACT

PURPOSE: To **enlarge** a main len aperture without **enlarging** a diameter of a bulb neck by forming a focusing **electrode** and an accelerating **electrode** as a cross sectional elliptic cylinder body whose three electron beam passing holes are blocked up in a prescribed **position** by an end plate arranged in an in-line shape, arranging a coaxial same-shaped...

...CONSTITUTION: An auxiliary **electrode** 9 is coaxially arranged between a focusing **electrode** 7 to impress focus voltage  $V_f$  and a final accelerating **electrode** 8 to impress plate voltage  $V_a$ , and  $V_f < V_m < V_a$  is impressed. The **electrode** 7 is composed of a cross-sectional elliptic cylinder body 11 blocked up by an elliptic end plate 10, and the end plate 10 exists in a **position** retreated from an opening 11a, and has electron beam passing holes 10a to 10c. The **electrode** 8 is also composed of a cylinder body 13 having a similar structure, and has beam passing holes 12a to 12c, and the **electrode** 9 has no end plate. Besides three main lens electric fields of the electrodes 7...

... generated in a condition where adjacent parts partially overlap with each other, since the auxiliary **electrode** 9 moderates a gradient of the axial electric potential distribution of a main lens part, an effective main lens aperture is expanded, and spherical **aberration** is reduced, and a small diameter light point is generated.

15/3,K/15 (Item 15 from file: 347)  
DIALOG(R)File 347:JAPIO  
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02583551 \*\*Image available\*\*  
LINEAR ELECTRON BEAM DEVICE

PUB. NO.: 63-200451 [JP 63200451 A]  
PUBLISHED: August 18, 1988 (19880818)  
INVENTOR(s): NAKAMURA TSUYOSHI  
KAWASE YUTAKA  
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 62-033970 [JP 8733970]

FILED: February 16, 1987 (19870216)  
JOURNAL: Section: E, Section No. 695, Vol. 12, No. 486, Pg. 8,  
December 19, 1988 (19881219)

ABSTRACT

... a mask smaller than a maximum deflection width with which stable beams with very little **aberration** or the like can be obtained, and next by aligning a sample on a **position** where electron beams passing through the mask aperture part are radiated, and thereafter by scanning linear electron beams **more** largely than the mask aperture width...

...emitted from an electron gun, which is composed of a linear cathode 1, a Wehnelt **electrode** 2, and an anode 3 in a vacuum container 14, are focused as linear electron...

15/3,K/16 (Item 16 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

02420645 \*\*Image available\*\*  
CATHODE-RAY TUBE

PUB. NO.: 63-037545 [JP 63037545 A]  
PUBLISHED: February 18, 1988 (19880218)  
INVENTOR(s): TAKAYAMA SHIGEHICO  
MARUYAMA MASANORI  
OKU KENTARO  
FUKUSHIMA MASAKAZU  
KATO SHINICHI  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 61-179923 [JP 86179923]  
FILED: August 01, 1986 (19860801)  
JOURNAL: Section: E, Section No. 633, Vol. 12, No. 250, Pg. 22, July  
14, 1988 (19880714)

ABSTRACT

PURPOSE: To prevent deflecting characteristics ( **aberration** and landing errors) from deteriorating, by installing both first and second cylindrical electrodes installed in...

...CONSTITUTION: An **electrode** G(sub 4) is a focusing **electrode** forming an electrostatic focusing lens as well as a deflecting **electrode** in type, and it forms such an electrostatic lens that makes the electron beam deflected together with an **electrode** G(sub 5) land on a photo-conductive film surface almost vertically. Since intensity of a collimation lens when the electron beam is deflected and a **position** where deflection is started are correspondent to 1:1, relation between an **electrode** inside diameter and length of the deflecting **electrode** and relation between these electrodes G(sub 4) and G(sub 5) in length both...

...and second electrodes G(sub 4) and G(sub 5), axial length of the first **electrode** 4 is set to 0.81-1.26 times over this first **electrode** diameter, and axial length of the second **electrode** G(sub 5) to 0.11-0.21 times over the axial length of the first **electrode** G(sub 4), respectively. With this constitution, there is no landing error and, what is **more**, such a cameral tube that is small in **aberration** is securable.

15/3,K/17 (Item 17 from file: 347)  
DIALOG(R)File 347:JAPIO



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02320746    \*\*Image available\*\*  
IN-LINE TYPE ELECTRON GAN

PUB. NO.:        62-237646 [JP 62237646 A]  
PUBLISHED:      October 17, 1987 (19871017)  
INVENTOR(s):    YANAI KEIJI  
                  ISHIDA RITSUO  
APPLICANT(s):   MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or  
                  Corporation), JP (Japan)  
APPL. NO.:      61-082627 [JP 8682627]  
FILED:          April 08, 1986 (19860408)  
JOURNAL:        Section: E, Section No. 597, Vol. 12, No. 108, Pg. 38, April  
                  07, 1988 (19880407)

#### ABSTRACT

PURPOSE: To make it possible to correct the deflecting **aberration** and to produce no convergence variation by the correction, by composing the central quadrupole axis-symmetrical, and forming the **electrode** pieces of both side quadrupole electrodes asymmetrical to the vertical plane in order to make...

...CONSTITUTION: Horizontal **electrode** pieces 1b, 1d, 3b, and 3d are formed narrower than horizontal **electrode** pieces 2b and 2d, and furnished moving outward a little. Therefore, the electric fields formed by vertical **electrode** pieces 1a and 3c are made **more** intense, and the electric field distributions around the center lines where electron beams 10B and...

... vertical planes passing the center lines. Consequently, even though a voltage to correct the deflecting **aberration** is applied to the quadrupole **electrode**, no convergence variation is produced. In this case, the same effect is gained by **positioning** the horizontal **electrode** pieces 1b, 1d, 3b and 3d moved outward to make their effective widths narrower, for...

15/3,K/18        (Item 18 from file: 347)  
DIALOG(R)File 347:JAPIO  
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01917242    \*\*Image available\*\*  
ELECTRON GUN FOR COLOR PICTURE TUBE

PUB. NO.:        61-131342 [JP 61131342 A]  
PUBLISHED:      June 19, 1986 (19860619)  
INVENTOR(s):    ENDO SATORU  
APPLICANT(s):   HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
                  (Japan)  
APPL. NO.:      59-251808 [JP 84251808]  
FILED:          November 30, 1984 (19841130)  
JOURNAL:        Section: E, Section No. 450, Vol. 10, No. 319, Pg. 115,  
                  October 30, 1986 (19861030)

#### ABSTRACT

PURPOSE: To obtain an electron gun, having a main lens **enlarged** aperture and capable of having a slantly directional non-point **aberration** removed, by moving back correcting **electrode** plates and forming the shape of lens-forming-opening parts in three-series circle...

...the arranging distance S on the beam point. Inside cup electrodes 31 and 41, correcting **electrode** plates 33 and 43 are installed, by welding

assembly, vertically to the tube axis direction and at the **position** in which they are moved back in the direction apart from the respective facing sides, by the assigned distances  $d(\text{sub } 1)$  and  $d(\text{sub } 2)$ . The correcting **electrode** plates 33 and 43 respectively consist of an elliptic opening 331, which is longer in...

15/3,K/19 (Item 19 from file: 347)  
DIALOG(R)File 347:JAPIO  
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01820736 \*\*Image available\*\*  
ELECTRON GUN FOR COLOR PICTURE TUBE

PUB. NO.: 61-034836 [JP 61034836 A]  
PUBLISHED: February 19, 1986 (19860219)  
INVENTOR(s): SHIRAI MASAJI  
NODA FUMIO  
IIOKA YOSHIKI  
YAMAUCHI MASAOKI  
FUKUSHIMA MASAKAZU  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
HITACHI DEVICE ENG CO LTD [486661] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 59-155300 [JP 84155300]  
FILED: July 27, 1984 (19840727)  
JOURNAL: Section: E, Section No. 416, Vol. 10, No. 186, Pg. 101, June 28, 1986 (19860628)

#### ABSTRACT

...lines undulate along the peripheral irregularities while curving so as to be convex to the **electrode** 11 on the central axes 15, 16 and 17 of the electron orbits and when...

...of the peripheral electrodes so that the effective apertures of the main lenses can be **enlarged** up to the vertical aperture diameter of the peripheral electrodes, while astigmatism is removed and no **electrode** plates are **placed** inside electrodes thus not deteriorating horizontal **aberration** characteristics. Accordingly, the inter-axial distances of the beams can be reduced while improving a...

15/3,K/20 (Item 20 from file: 347)  
DIALOG(R)File 347:JAPIO  
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00829456 \*\*Image available\*\*  
BEAM INDEX TUBE

PUB. NO.: 56-149756 [JP 56149756 A]  
PUBLISHED: November 19, 1981 (19811119)  
INVENTOR(s): JITSUKATA HIROSHI  
TAKADA MASANOBU  
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 55-052956 [JP 8052956]  
FILED: April 23, 1980 (19800423)  
JOURNAL: Section: E, Section No. 95, Vol. 06, No. 28, Pg. 143, February 19, 1982 (19820219)

# ABSTRACT

PURPOSE: To reduce spherical **aberration** and the pollution of a getter by using an intra-neck conductive film as a final acceleration **electrode** and holding the getter with a metallic member which is elastically connected to the inner surface of the neck independently of an electron gun **electrode** system...

...28 is applied to the inner surface of a neck 40 and an electron gun **electrode** system consisting of the first grid 21, second grid 22, and third grid 30 of...

... from the conductive film 28 and using the conductive film 28 as a final acceleration **electrode** . On the other hand, a ring type getter 26 is retained in a neck 40 by using three elastic metallic strand 50. This **enlarges** the diameter of an electrostatic principal lens, reduces its spherical **aberration** , and **positions** the getter in the neck. As a result, deposit of an aluminum film and pollution...

?

19/3,K/1 (Item 1 from file: 347)  
DIALOG(R) File 347:JAPIO  
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02490069 \*\*Image available\*\*  
HEAD DEVICE

PUB. NO.: 63-106969 [JP 63106969 A]  
PUBLISHED: May 12, 1988 (19880512)  
INVENTOR(s): MORIMOTO MASAO  
APPLICANT(s): CANON ELECTRONICS INC [365668] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 61-250664 [JP 86250664]  
FILED: October 23, 1986 (19861023)  
JOURNAL: Section: P, Section No. 761, Vol. 12, No. 354, Pg. 106, September 22, 1988 (19880922)

#### ABSTRACT

PURPOSE: To improve magnetic recording and reproducing characteristics, by coupling a head with a track **position** adjusting mechanism through an element which is deformed by the impression of a voltage or a current, and displaces the head in a direction of adjusting a track **position** .

...  
... lamination type piezoelectric element 16 is the one in which a piezoelectric material and an **electrode** which impresses the voltage on the material are laminated alternately, and when the voltage is applied on the **electrode** , it is contracted in a direction of a plate thickness by a piezoelectric longitudinal effect...

... the movement of the carriage, by driving the lamination type piezoelectric element 16, from a **position positioned** by the movement of the carriage 4. In such a way, it is possible to adjust the track **position** of the head **more** precisely, and to correct the **aberration** of the track **position** .

?

8/3,K/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00734887

A color picture tube

Farbbildrohre

Tube image couleur

PATENT ASSIGNEE:

MATSUSHITA ELECTRONICS CORPORATION, (456134), 1-1, Saiwai-cho,  
Takatsuki-shi, Osaka 569, (JP), (applicant designated states:  
DE;FR;GB;IT;NL)

INVENTOR:

Ueda, Yasuyuki, 1-5-14, Shodainaka-machi, Hirakata-shi, Osaka, 573, (JP)

LEGAL REPRESENTATIVE:

Crawford, Andrew Birkby et al (29761), A.A. THORNTON & CO. Northumberland  
House 303-306 High Holborn, London WC1V 7LE, (GB)

PATENT (CC, No, Kind, Date): EP 692811 A1 960117 (Basic)

EP 692811 B1 980916

APPLICATION (CC, No, Date): EP 95304767 950707;

PRIORITY (CC, No, Date): JP 94157749 940711

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: H01J-029/50;

ABSTRACT WORD COUNT: 195

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9838	218
CLAIMS B	(German)	9838	195
CLAIMS B	(French)	9838	240
SPEC B	(English)	9838	2099

Total word count - document A 0

Total word count - document B 2752

Total word count - documents A + B 2752

...SPECIFICATION are formed so as to have overlapping part between the adjacent ones and the supplementary **electrode placed** between the convergence **electrode** and the final accelerating electrode causes the electric potential distribution along the axis of the...

...have a moderate slope. As a result, the effective opening of the main-lens is **enlarged** and the spherical **aberration** and the lens magnification are both reduced, so that, the radius of the beam spot...

8/3,K/2 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00815189 \*\*Image available\*\*

OPTICAL WAVEFRONT MODIFIER

MODIFICATEUR DE SURFACE D'ONDE OPTIQUE

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
Eindhoven, NL, NL (Residence), NL (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

STALLINGA Sjoerd, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL  
(Residence), NL (Nationality), (Designated only for: US)

WALS Jeroen, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL (Residence),

NL (Nationality), (Designated only for: US)  
VREHEN Joris J, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL  
(Residence), NL (Nationality), (Designated only for: US)  
Legal Representative:  
VISSER Derk (agent), Internationaal Octrooibureau B.V., Prof Holstlaan 6,  
NL-5656 AA Eindhoven, NL,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200148748 A1 20010705 (WO 0148748)  
Application: WO 2000EP12991 20001219 (PCT/WO EP0012991)  
Priority Application: EP 99204524 19991224  
Designated States: JP KR US  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 7574  
  
Fulltext Availability:  
Claims

Claim

... the amount of coma to be compensated. This astigmatism must also be compensated by the **aberration** compensator 27. A **more** detailed analysis of the wavefront errors shows, that a decentred cornatic wavefront not only introduces...0 is zero along the horizontal direction in the Figure, from the cross 50 towards **electrode** 54. The width and **position** of **electrode** 54 is indicated by the dot and dash line 36 in Figure 2. The width...  
?

12/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01371197

**Method and apparatus for aberration correction**  
**Verfahren und Vorrichtung zur Aberrationskorrektur**  
**Methode et dispositif de correction d'aberration**

PATENT ASSIGNEE:

Pioneer Corporation, (2812420), 4-1 Meguro 1-chome, Meguro-ku, Tokyo,  
(JP), (Applicant designated States: all)

INVENTOR:

Ogasawara, Masakazu, Pioneer Corporation, Corporate R&D Laboratory, 6-1-1  
Fujimi, Tsurugashima-shi, Saitama 350-2288, (JP)

Iwasaki, Masayuki Pioneer Corporation, Corporate R&D Laboratory, 6-1-1  
Fujimi, Tsurugashima-shi, Saitama 350-2288, (JP)

Araki, Yoshitsugu, Pioneer Corporation, Corporate R&D Laboratory, 6-1-1  
Fujimi, Tsurugashima-shi, Saitama 350-2288, (JP)

LEGAL REPRESENTATIVE:

Klingseisen, Franz, Dipl.-Ing. et al (6557), Patentanwalte, Dr. F.  
Zumstein, Dipl.-Ing. F. Klingseisen, Postfach 10 15 61, 80089 Munchen,  
(DE)

PATENT (CC, No, Kind, Date): EP 1168055 A2 020102 (Basic)

APPLICATION (CC, No, Date): EP 2001114797 010627;

PRIORITY (CC, No, Date): JP 2000198163 000630; JP 2000342014 001109; JP  
2000380242 001214

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G02F-001/29; G11B-007/135

ABSTRACT WORD COUNT: 123

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200201	1169
SPEC A	(English)	200201	11655
Total word count - document A			12824
Total word count - document B			0
Total word count - documents A + B			12824

...SPECIFICATION correction device;

Fig. 17 is a plan view schematically illustrating the structure of a  
first **electrode** layer of the aberration correction device for  
correcting spherical **aberration** ;

Fig. 18 is a partially **enlarged** view schematically illustrating a  
portion (a portion A) of a first electrode layer of the...

...correction device;

Fig. 28 is a plan view schematically illustrating the structure of a  
first **electrode** layer of the aberration correction device for  
correcting spherical **aberration** ;

Fig. 29 is a partially **enlarged** view schematically illustrating a  
portion (a portion A) of the first electrode layer of the...

12/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS

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00993439

Cathode ray tube and deflection aberration correcting method of the same  
Kathodenstrahlrohre und Ablenkungsaberration-Kompensationsverfahren  
Tube a rayons cathodiques et methode de compensation de l'aberration de  
deflection

PATENT ASSIGNEE:

Hitachi, Ltd., (204145), 6 Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
101-8010, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Misono, Masayoshi, 2518 Hitotumatu Hei Choseison, Chosei-gun, Chiba-ken,  
(JP)

LEGAL REPRESENTATIVE:

Beetz & Partner Patentanwalte (100712), Steinsdorfstrasse 10, 80538  
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 898294 A2 990224 (Basic)

APPLICATION (CC, No, Date): EP 98122128 940110;

PRIORITY (CC, No, Date): EP 98122128 940110

DESIGNATED STATES: DE; FR; GB

RELATED PARENT NUMBER(S) - PN (AN):

EP 663681 (EP 941002511)

INTERNATIONAL PATENT CLASS: H01J-029/50; H01J-029/56;

ABSTRACT WORD COUNT: 150

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9907	1028
SPEC A	(English)	9907	33151
Total word count - document A			34179
Total word count - document B			0
Total word count - documents A + B			34179

...SPECIFICATION established between the parallel flat electrodes 68.

These parallel flat electrodes 68 constitute the deflection **aberration**  
correcting **electrode**. Thus, a **more** optimum deflection **aberration**  
correction can be achieved in the combination of the application of the  
cathode ray tube...

12/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00815188 \*\*Image available\*\*

OPTICAL WAVEFRONT MODIFIER

MODIFICATEUR DE FRONT D'ONDE OPTIQUE

Patent Applicant/Assignee:

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Eindhoven, NL, NL (Residence), NL (Nationality)

Inventor(s):

WALS Jeroen, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
VREHEN Joris J, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
STALLINGA Sjoerd, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

VISSER Derk (agent), Internationaal Octrooibureau B.V., Prof Holstlaan 6,  
NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200148747 A2-A3 20010705 (WO 0148747)



Application: WO 2000EP12990 20001219 (PCT/WO EP0012990)  
Priority Application: EP 99204525 19991224  
Designated States: CN JP KR  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 7289

Fulltext Availability:  
Detailed Description

Detailed Description

... under one electrode to the refractive index of the liquid crystal material under the neighbouring **electrode** . The reduction of the phase changes between electrodes reduces the **higher** order **aberrations** , even when the objective system I 1 is positioned offcentre. The particular width of the...

12/3,K/4 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00815185 \*\*Image available\*\*

OPTICAL SCANNING HEAD

TETE DE BALAYAGE OPTIQUE

Patent Applicant/Assignee:

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Eindhoven, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

VREHEN Joris J, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL  
(Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

WALS Jeroen, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL (Residence),  
NL (Nationality), (Designated only for: US)

STALLINGA Sjoerd, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL, NL  
(Residence), NL (Nationality), (Designated only for: US)

Legal Representative:

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NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200148744 A1 20010705 (WO 0148744)

Application: WO 2000EP12979 20001220 (PCT/WO EP0012979)

Priority Application: EP 99204523 19991224

Designated States: JP KR US

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 7359

Fulltext Availability:  
Detailed Description

Detailed Description

... under one electrode to the refractive index of the liquid crystal material under the neighbouring **electrode** . The reduction of the phase changes between electrodes reduces the **higher** order **aberrations** , even when the objective system I I is positioned offcentre. The particular width of the...

12/3,K/5 (Item 5 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00815182 \*\*Image available\*\*

**OPTICAL SCANNING HEAD**

**TETE DE BALAYAGE OPTIQUE**

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA  
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Inventor(s):

STALLINGA Sjoerd, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
VREHEN Joris J, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
WALS Jeroen, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

VISSER Derk (agent), Internationaal Octrooibureau B.V., Prof Holstlaan 6,  
NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200148741 A2-A3 20010705 (WO 0148741)

Application: WO 2000EP12987 20001219 (PCT/WO EP0012987)

Priority Application: EP 99204552 19991224

Designated States: JP KR

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 6436

Fulltext Availability:

Detailed Description

Detailed Description

... comprise one electrode layer for introducing two aberrations, e.g.  
coma and astigmatism, and one **electrode** layer for introducing another  
aberration, e.g. spherical **aberration** . One or **more** of the  
**aberrations** can be controlled to obtain a partial compensation.

?

7/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03722537 INSPEC Abstract Number: A90130704

**Title: Anticipated performance of achromatic quadrupole focusing systems when used with liquid metal ion sources**

Author(s): Harriott, L.R.; Brown, W.L.; Barr, D.L.

Author Affiliation: AT&T Bell Labs., Murray Hill, NJ, USA

Journal: Journal of Vacuum Science & Technology A (Vacuum, Surfaces, and Films) vol.8, no.4 p.3279-83

Publication Date: July-Aug. 1990 Country of Publication: USA

CODEN: JVTAD6 ISSN: 0734-2101

U.S. Copyright Clearance Center Code: 0734-2101/90/043279-05\$01.00

Language: English

Subfile: A

...Abstract: from liquid metal ion sources (LMIS) using axially symmetric electrostatic lenses are limited by chromatic **aberration** due to the relatively high ( approximately 10 eV) energy spread inherent in LMIS. The highest...

... lenses require both magnetic and electrostatic focusing elements. Lens acceptance angles are limited by the **electrode positions** and by the necessary magnetic gradients. The coefficients relating image distance to lens excitation of...

...excitation stabilities as high as 1 part per million in order to achieve current densities **more** than 10 A/cm/sup 2/, although such performance can be expected at beam energies...

...Identifiers: chromatic **aberration** ; ...

... **electrode positions** ;

7/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

02392476 INSPEC Abstract Number: B85014936

**Title: Thin-film dielectric AC plasma panels**

Author(s): Riederman, N.H.; Monarchie, D.L.; Wisnieff, R.E.; Keyworth, A.

Author Affiliation: Norden Systems Inc./United Technol. Corp., Norwalk, CT, USA

Conference Title: 1984 SID International Symposium. Digest of Technical Papers p.168-71

Publisher: Palisades Inst. Res. Services, New York, NY, USA

Publication Date: 1984 Country of Publication: USA 404 pp.

U.S. Copyright Clearance Center Code: 0097-0966X/84/0000-168-\$1.00+.00

Conference Sponsor: SID

Conference Date: 5-7 June 1984 Conference Location: San Francisco, CA, USA

Language: English

Subfile: B

...Abstract: optical characteristics can be made. The panel fabrication process steps evolved may gain production yields **higher** than yields experienced for thick film dielectric panels since high temperature processes are reduced in...

... the thin film dielectric panel is superior to thick film panels due to

less optical **aberration** . Because the Norden process is essentially oil (carbon) free, pixel outages may be reduced. The technique developed for **electrode** line open repair has given no secondary opens and techniques for spacer **placement** have yielded 'spacerless' panels.

...Identifiers: optical **aberration** ;

7/3,K/3 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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2230639 NTIS Accession Number: ADP011862/XAB

**LCD Diffractive Element Design to Handle Multiple Disk Thicknesses**

Freeman, M. O. ; Shih, H. P. ; Lee, Y. C. ; Ju, J. J.

Industrial Technology Research Inst., Hsinchu (Taiwan). Opto-Electronics and Systems Lab.

Corp. Source Codes: 108567003; 440425

2000 11p

Languages: English

Journal Announcement: USGRDR0213

Proceedings of SPIE, v4081. Published by: SPIE-The International Society for Optical Engineering. This article is from ADA399082 Optical Storage and Optical Information Held in Taipei, Taiwan on 26-27 July 2000.

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NTIS Prices: PC A03/MF A01

We describe the design of a single diffractive LCD element **placed** adjacent to the objective lens that can be addressed to provide the required spherical **aberration** (SA) compensation for a plurality of disk substrate thicknesses. It is now commonplace that optical disk drives must be able to handle disks of **more** than one substrate thickness. The major problem is compensating for the SA introduced when the...

... The liquid crystal modulates the phase and amplitude of the transmitted light according to the **electrode** pattern. We examine various approaches for the **electrode** layout that can implement 2-level, multi-level and continuous phase gratings in the LCD...

7/3,K/4 (Item 2 from file: 6)

DIALOG(R)File 6:NTIS

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1236837 NTIS Accession Number: DE86005736

**High-Spatial-Resolution Streak Image Tube**

Hinrichs, C. K. ; Olsen, R. W.

EG and G Energy Measurements, Inc., San Ramon, CA.

Corp. Source Codes: 081751000; 9517932

Sponsor: Department of Energy, Washington, DC.

Report No.: EGG-10282-4049; CONF-851136-5

Dec 85 26p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI8613; NSA1100

Meeting of the Plasma Physics Division of the American Physical Society, San Diego, CA, USA, 4 Nov 1985.

Portions of this document are illegible in microfiche products. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers);

(703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A03/MF A01

... tube was designed to provide improved spatial resolution across a large-diameter photocathode to obtain **more** spatial information. The first version of the tube did not employ an accelerator **electrode**. Tube design goals were achieved when operating at 30 kV. Spatial resolutions of 19 line ...

... 100 ps, depending on the wavelength of illumination. The electronic resolution is limited by chromatic **aberrations** to about 57 lp/mm; the overall tube resolution is limited to about 30 lp...

... 2-micron phosphor particle size used in the screen. In the second design, an accelerator **electrode** was **placed** in close proximity to the cathode to rapidly accelerate the photoelectrons. The chromatic **aberration** was dramatically reduced and the limiting time resolution was reduced to about 3 ps, making this version useful for inertial confinement fusion experiments. Reduction of the chromatic **aberration** allows good resolution at further off-axis **positions** so that a 2-in. photocathode can be used, approximately doubling the number of line...

7/3,K/5 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03516273 E.I. Monthly No: EI9212150690

**Title: Limiting current enhancement by self-induced redox cycling on a micro-macro twin electrode .**

Author: Horiuchi, Tsutomu; Niwo, Osamu; Morito, Mason; Tobci, Hisao

Corporate Source: Nippon Telegraph and Telephone Corp, Tokai, Jpn

Source: Journal of the Electrochemical Society v 138 n 12 Dec 1991 p 3549-3553

Publication Year: 1991

CODEN: JESOAN ISSN: 0013-4651

Language: English

**Title: Limiting current enhancement by self-induced redox cycling on a micro-macro twin electrode .**

...Abstract: reaction involving soluble species occurring at a microelectrode may be increased by moving a large **electrode** at open circuit close to the microelectrode. This phenomena is readily explained. The product of...

...nearest part of the macroelectrode and alters the concentration of the redox species at this **location** on the macroelectrode, compared to other locations at the **electrode** surface. In this situation, the macroelectrode behaves as a shorted concentration cell and attempts to reduce the concentration **aberration** caused by the reaction occurring at the microelectrode. This is accomplished by producing **more** of the original reactant for the microelectrode. This, in turn, increases the flux of reactant...

7/3,K/6 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

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2484394 H.W. WILSON RECORD NUMBER: BAST02126638

**Deformable mirror boosts coupling efficiency**

Bains, Sunny;

Laser Focus World v. 38 no5 (May 2002) p. 53-4

DOCUMENT TYPE: Feature Article ISSN: 1043-8092

...ABSTRACT: one of a large bundle of fibers. The switch use a laterally movable refractive lens **placed** between the fiber bundle and a mirror to redirect the light beam into a fiber within the bundle. With conventional mirrors, **aberrations** become **more** pronounced the further the target fiber is from the optical axis, making the scheme unsuitable for large bundles. To combat this, a deformable mirror was developed to correct these **aberrations**, resulting in high coupling efficiency and low cross-talk. The mirror consists of an Al...

...above an array of electrodes, and the degree of deformation is controlled by altering the **electrode** voltages.

DESCRIPTORS: ... **Aberration** (Optics;  
?